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July 13, 2011

Ms. Rebecca Thomas
Remedial Project Leader
U.S. EPA, Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

RE: Letter of Transmittal
Activity Based Sampling Summary Report and Subsequent Reporting
Libby Asbestos NPL Site - Operable Unit 6

Ms. Thomas:

The following document has been developed on behalf of the BNSF Railway Company (BNSF) to summarize the uploaded reports that cover work completed within Operable Unit 6 (OU6) since 2008. This submittal also provides a historical framework under which recent work has been conducted and documents a successful cooperative effort between the United States Environmental Protection Agency (EPA) and BNSF.

Introduction

Sampling efforts began in 2001 and focused on characterization of impacts in and around the Libby, Montana Railyard. Sampling efforts after remedial actions, which were completed at the BNSF Libby Railyard in 2004 and 2005, have primarily focused on receptor exposure during railroad maintenance activities. The largest of these efforts was an Activity Based Sampling (ABS) event, which occurred in late 2008 in cooperation with the EPA. In addition, BNSF has taken the initiative to conduct additional sampling events to ensure the safety of the public and workers during maintenance events within OU6.

For the purpose of the following discussion, the investigation and remedial action history for OU6 is divided into two sections: pre-2005 (prior to ABS) and post-2005 (including and after ABS).

Pre-2005 Investigation History

The majority of investigation efforts prior to 2005 focused on the characterization of vermiculite impacts at the railyard in Libby, Montana. The following is a summary of pre-2005 investigations and sampling efforts based on Camp, Dresser and McKey (CDM, 2007):

Date of Investigation/Action	Investigation/Action/Activity	Results
April, 2001	Soil Sampling in railyard and mileposts east of railyard	Asbestos detected in 3 samples within the railyard. All milepost samples were non-detect
November, 2001	Soil sampling in railyard	Asbestos detected in 3 composite and 5 individual samples (<1%)

October, 2002	Soil sampling in railyard for non-asbestos parameters for landfill disposal	Concentrations within acceptable landfill disposal limits.
November, 2002	Soil sampling in railyard	Detections in 8 composite samples (<1%) and 31 individual samples
August, 2003	Soil sampling in railyard	Asbestos detected in 3 composite samples (2%) and 12 individual samples (<1 to 3%)
July, 2004	Soil sampling in railyard	Asbestos detected in 8 samples (<1%) - splits were either ND or trace
September, 2004	Soil sampling in railyard	Asbestos detected in 2 composite samples and 6 individual samples (<1%)
Sept & October, 2004	Clearance samples for Removal Action soil excavation and capping	Detections (<1%) in 6 composite samples and 8 individual samples
October, 2004	Disposal characterization of railroad ties removed during Removal Action	No asbestos detected
2005	Clearance samples for additional area of soil contamination discovered after 2004 Removal Action.	No asbestos detected

It should be noted that the eight samples collected at milepost locations, along the BNSF mainline in April 2001, were all non-detect for asbestos.

Removal Action Summary

Following characterization of the asbestos impacts within the Libby railyard from 2001 to 2004, a Remedial Action Work Plan was developed. The Remediation Action Work Plan was approved by the EPA on September 1, 2004 and implemented between September and November 2004. In order to access the underlying, vermiculite-impacted soils, 14,091 feet of railroad track and 8,000 railroad ties were removed, decontaminated and either disposed or recycled. The Remedial Action Work Plan specified two options to address asbestos contaminated soils; excavation and in-place capping. Of the 8 zones defined for remedial action, 5 zones were excavated to clean limits, 3 zones were capped in-place. The clean limits of excavation were determined through clearance soil sampling. In excavation zones, a geotextile membrane was placed on top of the final excavation and then backfilled with clean soil. In capped zones, a geotextile liner was installed and then covered with clean fill. A total of 12,859.38 tons of soil were removed and sent to the asbestos cell of the Lincoln County, Montana landfill.

Prior to and during remedial actions, background air monitoring was conducted along the limits of the exclusion zone and personal air sampling was conducted on approximately 25% of the daily work force. The purpose of air monitoring was to ensure that project engineering controls were sufficient to protect workers and the public during construction.

A Construction Completion Report (CCR) was developed and submitted to the EPA to summarize the Remedial Action and clearance sampling results.

In November 2005, two previously identified areas containing Libby Amphibole were removed. Air and soil sampling procedures, identical to those utilized in the Remedial Action Work Plan, were employed during the soil removal. A total of 374 cubic yards of soil were removed and disposed at the Lincoln County landfill.

A CCR Addendum was developed and submitted to the EPA to summarize the 2005 Remedial Action and clearance sampling results. The CCR report and Addendum was accepted by the EPA in a letter to BNSF and dated April 21, 2010. BNSF is currently addressing Institutional Control measures, which when complete will allow closure of the Administrative Order on Consent.

Post-2005 Document Summary

Please find uploaded with this letter the following documents (original document date):

- Rail Crossing Air Monitoring Report (August 14, 2008)
- BNSF OSHA Exposure Sampling Summary Report – Steel Gang (February 12, 2009)
- BNSF Personnel OSHA Exposure Sampling Report – Supersurfacing Gang (August 19, 2009)
- BNSF Undercutter Spoils Sampling Report (December 11, 2009)
- Activity Based Sampling Summary Report – Public Receptors (March 12, 2010)
- Activity Based Sampling Summary Report – Worker Receptors (March 12, 2010)
- BNSF Asbestos Exposure Sampling Report – Steel Gang (July 27, 2010)
- BNSF Asbestos Exposure Sampling Report – Stimson Wye Removal (August 17, 2010)

The following is a brief summary of findings from each report.

Rail Crossing Air Monitoring Report (August 14, 2008)

Personal air monitoring was conducted on BNSF personnel involved with the replacement of the Jay Effar and Cedar Creek grade crossings in Libby, Montana on July 22, 23 and 29, 2008. Thirteen (13) personal air samples were collected from various BNSF personnel and submitted for AHERA Transmission Electron Microscopy (TEM) analysis by EMSL Laboratories in Libby, Montana. Asbestos was not detected in any of the samples.

BNSF OSHA Exposure Sampling Summary Report – Steel Gang (February 12, 2009)

Personal air monitoring was conducted simultaneously with Activity Based Sampling (ABS) in September, 2008. A total of 56 personal air samples were collected from BNSF personnel involved with maintenance activities within OU6 between September 17 and 25, 2008. All samples were analyzed using NIOSH 7400 or ISO 10312 methods. Although fibers were detected in several samples using the NIOSH 7400 methods, all resulting fiber concentration were under the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL). All samples analyzed using ISO 10312 methods were non-detect for asbestos.

BNSF Personnel OSHA Exposure Sampling Report – Supersurfacing Gang (August 19, 2009)

Personal and stationary air sampling were conducted during track alignment work that was conducted within OU6 between May 19 and 22, 2009. Twenty-four (24) personal air samples were collected from BNSF personnel associated with the work and 4 stationary air samples were collected from near the property boundary. All samples were non-detect for asbestos.

BNSF Undercutter Spoils Sampling Report (December 11, 2009)

Six (6) composite samples were collected from four (4) undercutting spoils piles generated during maintenance that occurred in June 2009. The spoils primarily consisted of sediment and other debris removed by the Undercutter from the ballast profile. All four (4) sampled piles were located within 1 mile of BNSF's Kootenai River siding. The soil samples were submitted to CDM for preparation and then to EMSL for analysis. No asbestos was detected.

Activity Based Sampling Summary Report – Public Receptors (March 12, 2010)

Personal air samples were collected to evaluate potential exposure risk for 2 different populations: 1) simulated Pedestrian Trespassers (14 samples); and 2) simulated On-looker Trespassers (7 samples). In addition, 22 stationary air and 62 soil samples were collected during the sampling event that took place in September 2008. Air and soil samples were analyzed by EMSL using ISO 10312 and PLM methods, respectively. Air samples were non-detect for asbestos. All soil samples were also non-detect for asbestos with the exception of two samples that had reported concentration less than 0.1% Libby Amphibole. The soil samples were collected from native soils outside the ballast profile.

Activity Based Sampling Summary Report – Worker Receptors (March 12, 2010)

Personal air samples were collected to evaluate the potential exposure risk for BNSF workers during rail maintenance activities. A total of 12 personal air samples were collected during the event and submitted to EMSL for analysis using ISO 10312 methods. No samples were reported with detectable concentrations of asbestos.

BNSF Asbestos Exposure Sampling Report – Steel Gang (July 27, 2010)

Personal and stationary air samples were collected from two separate BNSF maintenance groups that were simultaneously working in OU6 during March and April of 2010. A total of 60 personal and 26 stationary air samples were collected and submitted to EMSL for AHERA TEM analysis. No detections of asbestos were reported.

BNSF Asbestos Exposure Sampling Report – Stimson Wye Removal (July 28, 2010)

Personal and stationary air samples were collected during the removal of two tracks located between the BNSF mainline and the Stimson lumber yard in eastern Libby, Montana. Over the course of four days 3 personal and 10 stationary air samples were collected from, and adjacent to, the project area and submitted to EMSL for AHERA TEM analysis. None of the samples resulted in the detection of asbestos.

Conclusions and Recommendations

A number of maintenance events have been sampled since 2008 that are representative of both periodic and routine maintenance conducted by BNSF within OU6. No asbestos fiber detections have been reported from any of the 7 post-2008 air sampling events. Soil sampling conducted during ABS resulted in

only localized, trace concentrations of asbestos. Additionally, sampling of spoils generated by track structure cleaning, did not indicate the presence of asbestos.

Based on the data presented in the uploaded reports, maintenance activities within OU6 do not appear to pose a significant risk to BNSF maintenance workers or the general public. This data suggests that continued ABS or a remedial investigation is not warranted at this time.

OU6 Boundary Review

Based on the review of EPA-supplied maps, showing the March 24, 2010 boundaries of OU6, EMR has drawn the following conclusions:

- Mapped OU6 boundaries generally mimic BNSF property boundaries;
- Dimensions of OU6 boundaries do not match the property boundary dimensions;
- All tracks included within the OU6 boundaries are owned by BNSF;
- The tracks for the northern portions of the Stimson wye in Libby are not included in OU6; and
- The supplied maps do not show the southeastern limits of OU6.

Based on our conversation on September 8, 2010, the boundaries of OU6 should reflect BNSF property boundaries so that potential data gaps can be identified. BNSF will work with the EPA to revise the maps to accurately define the boundaries of OU6.

Please contact Mr. Dave Smith, BNSF Manager Environmental Remediation, at (406) 256-4046, or me at (218) 625-2332, extension 3303.

Sincerely,
EMR, Inc.,

Scott Carney, PG, CHMM
Duluth Division Manager

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